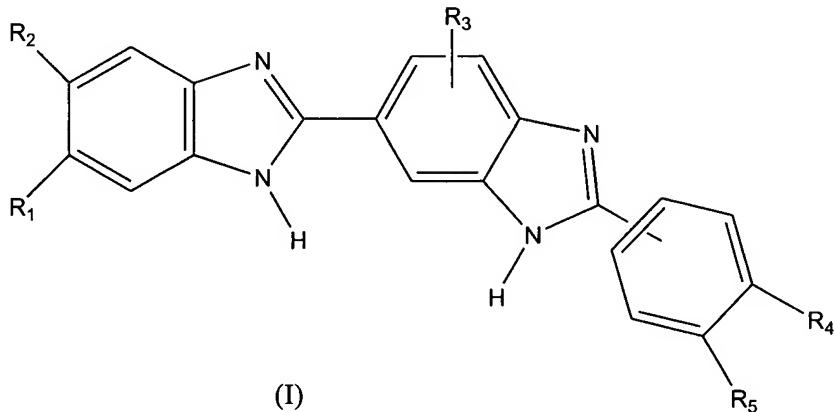


IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A therapeutic method comprising inhibiting cancer cells by administering to a mammal in need of such therapy, an amount of a compound of formula I:



wherein:

R<sub>1</sub> and R<sub>2</sub> are each independently hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, halo, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkythio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, aryl or heteroaryl; or R<sub>1</sub> and R<sub>2</sub> taken together are methylenedioxy; or R<sub>1</sub> and R<sub>2</sub> taken together with the atoms to which they are attached are benzo; wherein any aryl, heteroaryl, or benzo may optionally be substituted by 1, 2, or 3 substituents independently selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, and halo;

R<sub>3</sub> is hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, or halo; and

R<sub>4</sub> and R<sub>5</sub> taken together are a 3, 4, or 5 membered saturated or unsaturated chain comprising members selected from the group consisting of non-peroxide oxygen, sulfur, N(X), and carbon, optionally substituted by oxo; wherein each X is independently absent or is H, O,

(C<sub>1</sub>-C<sub>6</sub>)alkyl, phenyl or benzyl; and wherein at least one of said chain members is an N-H group; or a pharmaceutically acceptable salt thereof;

provided R<sub>4</sub> and R<sub>5</sub> taken together are not -N(H)-C(H)=N-; effective to inhibit said cancer cells.

2. (Original) The method of claim 1 wherein R<sub>1</sub> is hydrogen, halo, aryl or heteroaryl; wherein any aryl or heteroaryl may optionally be substituted by 1, 2, or 3 substituents independently selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, and halo.

3. (Original) The method of claim 1 wherein R<sub>2</sub> is hydrogen, halo, aryl or heteroaryl; wherein any aryl or heteroaryl may optionally be substituted by 1, 2, or 3 substituents independently selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, and halo.

4. (Original) The method of claim 1 wherein R<sub>1</sub> and R<sub>2</sub> taken together are methylenedioxy.

5. (Original) The method of claim 1 wherein R<sub>1</sub> and R<sub>2</sub> taken together are benzo, which benzo is optionally substituted by 1, 2, or 3 substituents independently selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, and halo.

6. (Original) The method of claim 1 wherein R<sub>3</sub> is hydrogen.

7. (Original) The method of claim 1 wherein R<sub>3</sub> is (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, or halo.

8. (Original) The method of claim 1 wherein R<sub>4</sub> and R<sub>5</sub> taken together are -N(H)-N=N-, -N(H)-N(H)-CH<sub>2</sub>-, -N(H)-N(H)-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-N(H)-, -N(H)-CH=CH-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)CH<sub>2</sub>-CH<sub>2</sub>-N(H)-, -N(H)CH<sub>2</sub>-CH<sub>2</sub>-O-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-S-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-, N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-S-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-S-CH<sub>2</sub>-, -N(H)-C(=O)-C(=O)-CH<sub>2</sub>-, -N(H)-C(=O)-C(=O)-N(H)-, -N(H)-C(=O)-C(=O)-O-, -N(H)-C(=O)-C(=O)-S-, -N(H)-C(=O)-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-N(H)-C(=O)-, -CH<sub>2</sub>-S-CH<sub>2</sub>-N(H)-, -CH<sub>2</sub>-N(H)-CH<sub>2</sub>-S-, -CH<sub>2</sub>-N(H)-CH<sub>2</sub>-, -CH<sub>2</sub>-CH<sub>2</sub>-N(H)-CH<sub>2</sub>-, -CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-CH<sub>2</sub>-, -CH<sub>2</sub>-N(H)-CH<sub>2</sub>-CH<sub>2</sub>-O-, or -CH<sub>2</sub>-N(H)-CH<sub>2</sub>-CH<sub>2</sub>-S-.

9. (Original) The method of claim 1 wherein R<sub>4</sub> and R<sub>5</sub> taken together are -N(H)-N=N-, -N(H)-CH<sub>2</sub>-N(H)-, -N(H)-CH=CH-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-O-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-S-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-S-, or -N(H)-C(=O)-C(=O)-N(H)-.

10. (Currently amended) The method of claim 1 wherein R<sub>4</sub> and R<sub>5</sub> taken together are -N(H)-N=N-, -N(H)-C(=O)-N(H)-, -N(H)-C(=O)-C(=O)-N(H)-, -N(H)-CH=CH-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, or -N(H)-CH<sub>2</sub>-N(H)-.

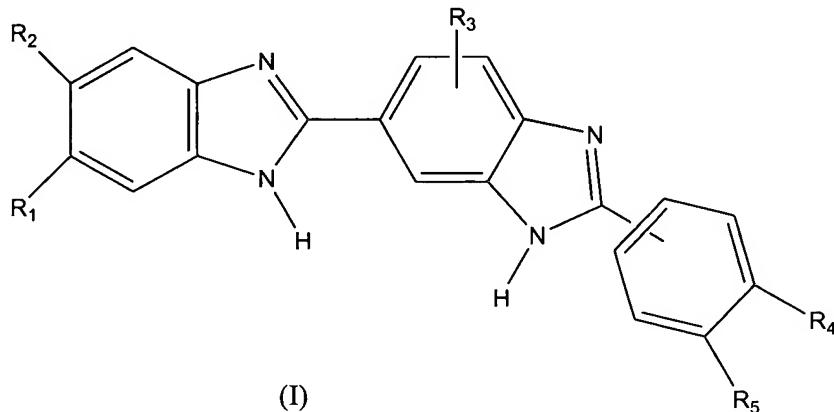
11. (Original) The method of claim 1 wherein R<sub>4</sub> and R<sub>5</sub> taken together are -N(H)-N=N- or -N(H)-C(=O)-C(=O)-N(H)-.

12. (Original) The method of claim 1 wherein R<sub>1</sub> and R<sub>2</sub> are not both hydrogen.

13. (Original) The method of claim 1 wherein R<sub>1</sub> and R<sub>2</sub> are each independently halo.

14. (Original) The method of claim 1 wherein R<sub>1</sub> and R<sub>2</sub> are each bromo.

15. (Original) A method comprising inhibiting cancer cells by contacting said cancer cells with an effective amount of a compound of formula I:



wherein:

R<sub>1</sub> and R<sub>2</sub> are each independently hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, halo, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, aryl or heteroaryl; or R<sub>1</sub> and R<sub>2</sub> taken together with the atoms to which they are attached are benzo; wherein any aryl, heteroaryl, or benzo may optionally be substituted by 1, 2, or 3 substituents independently selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, and halo;

R<sub>3</sub> is hydrogen (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxy, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, or halo; and

R<sub>4</sub> and R<sub>5</sub> taken together are a 3, 4, or 5 membered saturated or unsaturated chain comprising members selected from the group consisting of non-peroxide oxygen, sulfur, N(X), and carbon, optionally substituted by oxo; wherein each X is independently absent or is H, O,

(C<sub>1</sub>-C<sub>6</sub>)alkyl, phenyl or benzyl; and wherein at least one of said chain members if an N-H group; or a pharmaceutically acceptable salt thereof;

provided R<sub>4</sub> and R<sub>5</sub> taken together are not -N(H)-C(H)=N-.

16. (Original) The method of claim 15 wherein R<sub>1</sub> is hydrogen, halo, aryl or heteroaryl; wherein any aryl or heteroaryl may optionally be substituted by 1, 2, or 3 substituents independently selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxy, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, and halo.

17. (Original) The method of claim 15 wherein R<sub>2</sub> is hydrogen, halo, aryl or heteroaryl; wherein any aryl or heteroaryl may optionally be substituted by 1, 2, or 3 substituents independently selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, and halo.

18. (Original) The method of claim 15 wherein R<sub>1</sub> and R<sub>2</sub> taken together are methylenedioxy.

19. (Original) The method of claim 15 wherein R<sub>1</sub> and R<sub>2</sub> taken together are benzo, which benzo is optionally substituted 1, 2, or 3 substituents independently selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, and halo.

20. (Original) The method of claim 15 wherein R<sub>3</sub> is hydrogen.

21. (Original) The method of claim 15 wherein R<sub>3</sub> is (C<sub>1</sub>-C<sub>6</sub>)alkoxy, nitro, hydroxy, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, trifluoromethoxy, (C<sub>1</sub>-C<sub>6</sub>)alkanoyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)alkylthio, (C<sub>2</sub>-C<sub>6</sub>)alkanoyloxy, or halo.

22. (Original) The method of claim 15 wherein R<sub>4</sub> and R<sub>5</sub> taken together are -N(H)-N=N-, -N(H)-N(H)-CH<sub>2</sub>-, -N(H)-N(H)-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-N(H)-, -N(H)-CH=CH-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)CH<sub>2</sub>-CH<sub>2</sub>-N(H)-, -N(H)CH<sub>2</sub>-CH<sub>2</sub>-O-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-S-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-, N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-S-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-S-CH<sub>2</sub>-, -N(H)-C(=O)-C(=O)-CH<sub>2</sub>-, -N(H)-C(=O)-C(=O)-N(H)-, -N(H)-C(=O)-C(=O)-O-, -N(H)-C(=O)-C(=O)-S-, -N(H)-C(=O)-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-N(H)-C(=O)-, -CH<sub>2</sub>-S-CH<sub>2</sub>-N(H)-, -CH<sub>2</sub>-N(H)-CH<sub>2</sub>-S-, -CH<sub>2</sub>-N(H)-CH<sub>2</sub>-, -CH<sub>2</sub>-CH<sub>2</sub>-N(H)-CH<sub>2</sub>-, -CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-CH<sub>2</sub>-, -CH<sub>2</sub>-N(H)-CH<sub>2</sub>-CH<sub>2</sub>-O-, or -CH<sub>2</sub>-N(H)-CH<sub>2</sub>-CH<sub>2</sub>-S-.

23. (Original) The method of claim 15 wherein R<sub>4</sub> and R<sub>5</sub> taken together are -N(H)-N=N-, -N(H)-CH<sub>2</sub>-N(H)-, -N(H)-CH=CH-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-O-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-S-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-S-, or -N(H)-C(=O)-C(=O)-N(H)-.

24. (Currently amended) The method of claim 15 wherein R<sub>4</sub> and R<sub>5</sub> taken together are -N(H)-N=N-, -N(H)-C(=O)-N(H)-, -N(H)-C(=O)-C(=O)-N(H)-, -N(H)-CH=CH-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-, -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, or -N(H)-CH<sub>2</sub>-CH<sub>2</sub>-N(H)-.

25. (Original) The method of claim 15 wherein R<sub>4</sub> and R<sub>5</sub> are taken together are -N(H)-N=N- or -N(H)-C(=O)-C(=O)-N(H)-.

26. (Original) The method of claim 15 wherein R<sub>1</sub> and R<sub>2</sub> are not both hydrogen.

27. (Original) The method of claim 15 wherein R<sub>1</sub> and R<sub>2</sub> are each independently halo.

28. (Original) The method of claim 15 wherein R<sub>1</sub> and R<sub>2</sub> are each bromo.